**Abstract**

A trench MIS device is formed in a P-epitaxial layer that overlies an N-epitaxial layer and an N+ substrate. In one embodiment, the device includes an N-type drain-drift region that extends from the bottom of the trench to the N-epitaxial layer. Preferably, the drain-drift region is formed at least in part by fabricating spacers on the sidewalls of the trench and implanting an N-type dopant between the sidewall spacers and through the bottom of the trench. The drain-drift region can be doped more heavily than the conventional "drift region" that is formed in an N-epitaxial layer. Thus, the device has a low on-resistance. The device can be terminated by a plurality of polysilicon-filled termination trenches located near the edge of the die, with the polysilicon in each termination trench being connected to the mesa adjacent the termination trench. The polysilicon material in each termination trenches.